WORKERS' COMPENSATION BOARD - ALBERTA

WORKERS' COMPENSATION COVERAGE

versus

PRIVATE INSURANCE

A COMPARATIVE STUDY

Prepared by:

CROUSE DORGAN CONSULTANTS INC.

1771 T.D. Tower, Edmonton Centre
Edmonton, Alberta
T5J 2Z1

May, 1990

Crouse Dorgan Consultants Inc.
Strategic Actuarial, Benefits & Compensation Services

Suite 1771
Toronto Dominion Tower
Edmonton Centre
Edmonton, Alberta T5J 2Z1

91-01371/

JOHN W. CROUSE, Principal
PERRY V. DORGAN, Principal
DOUGLAS A. SHARP, Principal

PHONE (403) 424-1771
FAX (403) 420-6082

May 25, 1990

PERSONAL & CONFIDENTIAL

Mr. Kenneth C. Pals
President and Chief Executive Officer
Workers' Compensation Board - Alberta
9912 - 107 Street
P.O. Box 2415
Edmonton, Alberta
T5J 2S5

Dear Mr. Pals:

RE: WORKERS' COMPENSATION COVERAGE vs PRIVATE INSURANCE - A COMPARATIVE STUDY

We are pleased to present the results of our study comparing workers' compensation coverage in Alberta with that availabie under private insurance schemes. For convenience, our report has been divided into sections as follows:

Section	I	Communication Summary
	II	Purpose of the Study
	III	Project Methodology
	IV	Observations and Conclusions
Appendix	A	Major Workers' Compensation Board - Alberta Benefits
	B	Private Insurance Benefit Comparisons
	C	Experience Rating Comparisons
	D	Detailed Comparison Grids
	E	Financial Summaries
	F	Disability Replacement Ratios
	G	Steering Committee

We would especially like to acknowledge and thank the Steering Committee members for their first-hand experience and insight into the key areas of workers' compensation benefits and legislation that are of concern to employers and employees in Alberta today.

Respectfully submitted for,

CROUSE DORGAN CONSULTANTS INC.

John W. Crouse, MA, FSA, FCIA
Principal

Perry V. Dorgan
Principal

JWC/PVD/dmp

Enclosure

TABLE OF CONTENTS

			Page No.
Section	**I**	Communication Summary	1
Section	**II**	Purpose of the Study	3
Section	**III**	Project Methodology	5
Section	**IV**	Observations and Conclusions	21
Appendix	**A**	Major Workers' Compensation Board - Alberta Benefits ...	25
Appendix	**B**	Private Insurance Benefit Comparisons	27
Appendix	**C**	Experience Rating Comparisons	30
Appendix	**D**	Detailed Comparison Grids	32
Appendix	**E**	Financial Summaries	41
Appendix	**F**	Disability Replacement Ratios	43
Appendix	**G**	Steering Committee	45

SECTION I -- COMMUNICATION SUMMARY

Over the past year, a number of employers across the province questioned the Workers' Compensation Board - Alberta (WCB) as to whether their benefits and coverage were competitive with that provided by the private insurance sector in the Alberta marketplace. As a result, this study was commissioned to compare the relative merits of each system.

The objective of this study is to bring to light the factors affecting the comparison of WCB benefits with those available from the private insurance sector and to communicate the results of the study to interested employers. The study has been completed with the assistance of a five person Steering Committee. (See Appendix G).

The key element in the methodology of this study is the separation of the comparison into three separate areas - benefits design, benefits funding, and benefits delivery. Within each separate area, the study analyzes the various factors impacting on that area. In benefits design, the impact of each provision of each benefit is examined. In benefits funding, the impact of employer size and industry risk is examined relative to the relevant rating systems. In benefits delivery, the overall effectiveness of each system and the impact of employer size is examined.

Our key observations are:

1. Workers' compensation benefits are generally more varied and richer than private insurance equivalents. This tends to make WCB appear more expensive.
2. A major focus of the workers' compensation system is on the mandate to rehabilitate injured workers. While the administrative costs of this initiative are easy to assess, the ultimate cost impact of this rehabilitation service is not easily quantified. Private insurance has only a cursory focus on rehabilitation and the major rationale is cost control. This important feature of workers' compensation coverage also makes WCB benefits appear more expensive.
3. The major difference between the two approaches in the rating process relates to the ability of private insurance to underwrite selectively. This underwriting process

is absent from WCB due to universality of coverage. As a result, large sectors of the population benefit financially under the WCB program (e.g. smaller employers and better risk groups) while other sectors do not.

4. Investment results and the funded status of WCB have generally favored employers over the last five years. A more aggressive asset mix investment policy in the future will assist in achieving full funding.

5. In terms of the delivery costs of benefits, the overall record of WCB has been good. WCB has certain advantages over the private sector in the areas of profit margins, low sales expenses, no premium taxes and better investment results that are directly reflected to employers. These advantages have been partially offset by higher general overhead and claims-related expenses resulting from the rehabilitation service mandate of WCB.

In summary, our observation is that WCB and private insurance do not currently operate on the same basis when it comes to the delivery of occupational benefits. Each party is afforded advantages in certain situations and placed at a disadvantage in others, as a result of the fundamental difference between the two sectors in overall missions, goals and resulting policies. If each were to operate on the same basis in a totally competitive environment there would be fewer differences than are revealed in this study.

Many factors impact on the comparisons in this report for individual employer groups. Cursory conclusions should not be drawn. Rather, the general tendencies of each system should be noted. Our final conclusion is that neither system is *better*, with each system offering advantages to selected groups in a hypothetical competitive environment.

SECTION II -- PURPOSE OF THE STUDY

Workers' compensation was founded as a means of providing a compulsory no-fault form of disability insurance for workers injured in the course of employment. Workers are automatically compensated for injuries or illness sustained at work, regardless of fault. The system is compulsory on two fronts: employers as a group must pay all premiums and compensation as a cost of doing business; and workers are obliged to participate, surrendering their right to take legal action against their employer for negligent acts.

The fundamental principles that underlie the workers' compensation system have evolved over the years since the concept was first introduced in North America. In several U.S. states, employers have the right to either accept or reject the state workers' compensation system. However, in opting out of the system, employers are prohibited from using the defenses of contributory negligence, assumption of risk, and negligence of fellow workers when sued by injured workers. The majority of American states and all of the Canadian provinces require employers to participate in their workers' compensation systems and to provide the cost of compensation.

Notwithstanding the fact that the current situation in Alberta and rest of Canada requires employers to participate in the provincial system, employers from time to time have voiced the opinion that *private* insurance would be a more cost effective option. The purpose of this study is to investigate all aspects of this *private* insurance comparison and communicate the results of our findings.

This study was carried out with the assistance of a Steering Committee of five members representing a broad cross-section of employers in the province (see listing in Appendix G).

The initial meeting of the Steering Committee formulated the following objectives to guide the conduct of the study:

OBJECTIVE # 1

"To have an outside actuarial consulting firm with relevant professional experience compare the costs, services, and benefits of coverage provided by Workers' Compensation Board - Alberta, with comparable coverage available from the insurance marketplace in Alberta."

OBJECTIVE # 2

"To communicate the results of this independent study to the employers of Alberta."

It was clear from the onset that the comparison would involve more than simply comparing *costs*. No *directly* comparable private insurance option exists due to the mandated nature of the provincial plans, therefore it was important to dissect all aspects of the provincial system and develop reasonable comparisons for the private sector based upon our experience in the marketplace. We were guided in our analysis by the mission statement of the Workers' Compensation Board - Alberta, which states:

MISSION

"To serve workers and employers by reducing injuries, compensating workers while disabled, and rehabilitating to re-employment or self-sufficiency."

GOALS

To reduce workplace injuries
To replace wages lost as a result of workplace injury
To achieve early re-employment of injured workers
To achieve early restoration of pre-accident independence
To manage resources with fiduciary care

It is important to bear these goals in mind when comparing with the private insurance option. The missions and goals of the private insurance industry are diverse and far broader due to the nature of their overall business. These diverse goals result in different approaches serving different constituents.

SECTION III -- PROJECT METHODOLOGY

The strategic management in compiling this study required the development of a twelve step process, leading out of the formative meeting of the Steering Committee and culminating with presentation of our final report. Each step is detailed below to give the appropriate background behind our key observations.

STEP # 1 - Preliminary Meeting of the Steering Committee

Our purpose was to:

- ratify the study objectives;
- define the roles of the consultants and the Steering Committee;
- finalize the critical path including subsequent committee meetings; and
- identify any external resources which would be useful in the course of the study.

Several useful pieces of information from the following similar studies were identified for subsequent distribution to all committee members:

1) **Workers' Compensation in Ontario** - A Study of the Costs, Impacts, and Strategies for Responsible Control:
   - Completed for the Canadian Federation of Independent Business in November of 1987.

2) **Workers' Compensation in Canada** - Facing New Realities:
   - A position paper by the Canadian Manufacturers' Association completed in 1988.

STEP # 2 - Detailed Review of The Workers' Compensation Act Alberta

A review of the current provisions of the act was completed to ensure all aspects of the system were extracted for private insurance comparison. Recent coverage amendments were also reviewed to better understand the recent evolution of the system and how that evolution parallels or diverges from the private system. A detailed summary of all WCB benefits is shown in Appendix A.

The current Act was effective January 1, 1982, with several changes made in 1986, 1987 and 1988. The effective date of January 1, 1982 reflects a major new policy direction which included:

1) An increase in assessable payroll from $22,000 to $40,000. This change has dramatically increased the scope of WCB coverage, bringing it more in line with private insurance.

2) A change in benefit level from 75% of gross earnings (maximum $22,000) to 90% of net earnings (maximum $40,000). This change impacted more on the benefits for lower paid workers although the ultimate objective was to focus on take-home (net) pay as the basis for compensating workers. Combined with the fact that WCB benefits are not taxable, this change widened the gap between WCB and private benefits which are lower and generally taxable. Appendix F lists some benefit replacement ratios which illustrate this point.

3) Major changes in widows' benefits. Prior to 1982, payments to widows were focused on the subsequent death or remarriage of the widow as the termination conditions. Post 1981 benefits are geared more to the age of dependent children and employability of the spouse subsequent to the last child attaining age 18. This has brought the continued payment of a widow's benefit more in line with the economic realities of life.

4) Reimbursement to Alberta Health Care (AHC) of all medical aid provided under AHC including relevant administrative costs.

The major result of the detailed analysis of the Act was to break down the benefits provided by WCB into five areas:

1) **Compensation** - Bi-weekly benefits made for temporary disabilities until return to work or achievement of permanent status.

2) **Permanent Disabilities** - Monthly disability payments made for life, subject to annual review.

3) **Fatalities** - All payments made as the result of the death of a covered worker including lump sum payments and ongoing pensions to widows and dependent children.

4) **Medical Aid** - All medical expenses related to a covered event including expenses, subsistence and home care allowances.

5) **Vocational Rehabilitation** - All forms of assistance given to workers and widows, where appropriate, to lessen their handicaps resulting from injury.

Since the cessation of compensation benefits and the subsequent onset of permanent disability benefits is not uniquely defined, these two benefits were combined under the title of Disability to facilitate a better comparison with private insurance.

STEP # 3 - Review of Financial History

The comparison of *cost* was much more than a review of rates. The financial basis upon which the integrity of the entire system rests had to be completely researched. Although comparable in many respects to an insurance company, the WCB also has significant financial and other plan design departures. As part of the financial review, we completed the following:

1) A review of the 1986 through 1988 financial reports. Specifically, information from the 1988 report was used to isolate the overall cost of the benefits defined in Step # 2. (At the time this report was written, the 1989 financial report was not available.)

2) A review of "Financial and Statistical Highlights 1988" prepared by the WCB. This publication summarized relevant financial and experience information for recent periods and for other provincial boards.

3) A review of the December 31, 1988, report on the Actuarial Valuation of the Accident Fund. This report provided supporting technical information to the reserve liability information contained in the financial statements. Assumptions used in the establishment of long term reserves were especially useful in drawing private insurance comparisons.

4) A review of the SEI Funds Evaluation Balanced Fund Reports as at December 31, 1988, and December 31, 1987. These reports capture the essence of the performance of the investment of the assets supporting the reserve liabilities. As at December 31, 1988, these assets totalled nearly $1.5 billion. The investment income earned in reserve assets is a direct offset to claims and administrative expenses. Current investment income comprises more than 30% of all Board revenue. In the long run, investment income can pay up to two-thirds of the cost of a permanent disability pension. Comparison of investment returns as embodied in this report are a major factor in determining the comparability of WCB with private insurance.

5) A review of some of the Quarterly Policy Reports of the Investment Management Division. As a supplement to the SEI measurement reports, these reports gave further insight into the objectives and constraints under which the assets are managed.

6) A review of current experience rating methodology. This is one of the most important factors in determining the competitive position of workers' compensation versus private insurance. Experience rating is a process by which broad based premiums are adjusted to more closely reflect the experience of individual groups. WCB experience rating process has undergone considerable change during the 1980s. Although it now more closely reflects private insurance practices, there are still significant differences that bear a major impact on cost comparability in the two systems.

7) A review of assessment rates and associated rating methodology. Assessment rates are a major source of WCB revenue (68% in 1988) and are comparable to premiums in the private environment. As important as the rates themselves, is the classification of industries upon which the rates are based. Current rates are a reflection of the collective experience history of all industry classifications, however small. An understanding of the assessment process and its private insurance counterparts is essential in understanding cost comparability.

Results of this step form the backbone of the study and lead directly to the next four steps.

STEP # 4 - Calculation of the Value of WCB Benefit Components

Since the benefits provided under WCB legislation are an aggregate of five different components, each of which has a different private insurance comparison, it was necessary to calculate the cost of each component based upon recent WCB financial experience. The following information, extracted from the 1988 financial report, was used to calculate an *average assessment rate*:

Category	Expenses in 000's	Cost as % Payroll
Compensation	$124,406	.63%
Permanent Disabilities	112,778	.58%
Medical Aid	51,858 *	.26%
Vocational Rehab	15,833	.08%
Fatalities	8,507	.04%
Total	$313,382	1.59%

* *includes costs of operating rehabilitation centre*

This *average assessment rate* of 1.59% has no direct private insurance comparison but is useful in relating the relativities of each benefit component. The components were then compared on a benefit design and cost basis in Step # 7.

STEP # 5 - Research of Private Insurance Companies

Having dissected the various benefits payable under the WCB legislation, it was necessary to research the nature of private insurance comparisons. This was made more difficult since the Alberta and Canadian environments had no element of private competition. The comparable Canadian environment largely consists of group insurance benefits (disability, life and extended health) provided through several insurers who are competitive in the disability area. (The *broad-based* comparisons of policy provisions which we developed are summarized in Appendix B.)

Albeit that sole proprietors could access the *individual* disability market as a possible alternative to the disability portion of WCB benefits, our review concentrated on the group market. Individual disability benefits are comparable to group benefits in most of the key plan design areas. From a funding standpoint, their sale is extremely selective

due to stringent *individual* underwriting conditions. For those applicants who are accepted for coverage, the cost is generally much higher than group insurance for comparable risks.

STEP # 6 - Calculation of the Value of Private Insurance Components

In order to ensure a proper comparison of WCB and private insurance costs, a number of areas were examined:

1) **Underwriting** - The underwriting process is diligently adhered to in private insurance but absent from the workers' compensation environment, outside of the employer classification process. This has a major impact on both the ultimate cost of benefits and the market in which these benefits are delivered. In a non-competitive environment, workers' compensation benefits must have universal access. Private insurance can be selective, generally resulting in lower costs. However, any savings must be weighed against the fact that the risk profile of an insured (i.e. selective) book of business will be different from a universal workers' compensation book of business.

2) **Operational Costs** - A major difference in the delivery of benefits results from the universality of workers' compensation benefits. Essentially, no sales costs are incurred and there is no need to develop profit margins. These two factors make up a considerable portion of private insurance operational costs. Investment returns were also examined in this context.

3) **Basic Benefits** - Due to the fact that comparable benefits from private insurance would come from several different sources (short term disability, long term disability, extended health, accidental death and dismemberment, and survivor income benefit), it was necessary to develop relative costs for each major feature of each component.

   For example, WCB benefits are periodically adjusted for increases in the cost-of-living. Private benefits seldom include any cost-of-living adjustments. It was determined that this feature was of 30% less value in a private insurance contract. Private insurance disability benefits are payable as a result of both injury and sickness while WCB is primarily an injury benefit. Therefore, we calculated this feature to be 30% to 100% more valuable in the private insurance.

Each of ten different disability features, three different death features, three different medical aid features, and three different vocational rehabilitation features were costed in this manner. These were then weighted by the relative value of each of the features to obtain a weighted aggregate value for each benefit component.

Finally, these aggregate values were weighted by the 1988 WCB component percentages determined in Step # 4 to determine the overall *value* of typical private insurance coverage relative to workers' compensation coverage. This ultimate relative value of .76 means that typical private insurance coverage available in Alberta provides benefits which are only 76% as valuable as workers' compensation benefits in Alberta. Put another way, private insurance should cost about 24% less (1 - .76) than WCB, all other things being equal, since it provides 24% less value.

4) **Statutory Funding** - Private insurance is strictly regulated and all benefits are provided on a *full-funding* basis. This means that current premiums must be sufficient to provide for currently accruing costs. Workers' compensation benefits in Canada and in the U.S. are not regulated in the same manner as private insurance, since they must be more responsive to social policy. The funded status of state plans in the U.S. varies dramatically. The funded status is usually a function of whether or not state plans compete with private insurers and the market share penetrations that state plans achieve.

   In Canada, the funded status also varies widely. In 1988 it varied from being 27.4% overfunded (four boards were overfunded) to 62% underfunded (eight boards were underfunded). The relevance of underfunding is that benefits are currently (or at least have been in the past) delivered at less than full cost. If the funded status is to improve in the future, costs may have to rise above the *fully funded cost* to ensure an amortization of the unfunded liability. Underfunding does exist in a privately insured environment but only for relatively short periods and only for isolated groups. This factor tends to obscure the true comparison between workers' compensation and private insurance costs. The WCB program is currently about 20% underfunded. Current assessment rates (1990) have been increased to more closely reflect full funding.

5) **First Payor Status** - A major cornerstone of the workers' compensation system is the assumption of the role of *first payor*. This simply means that workers' compensation always assumes the leading role where benefits from other plans may be payable. Workers' compensation makes their payments regardless of how the other plans assess the claim or what level of payments they ultimately make.

   Insured plans are generally *last payor* plans. Although they make a separate adjudication of the claim, the level of their benefits are contingent upon what is paid under other plans [WCB and Canada Pension Plan (CPP) for example].

   Generally in the private sector, the amount of benefit payable from other plans is deducted from the insured benefit. This factor is anticipated in premium rates and therefore makes direct comparison of costs more difficult. We have reflected only the CPP offset in our relative value analysis. The fact that workers' compensation is a *first payor* is an important fact to be kept in mind when comparing these numbers.

STEP # 7 - Mid-Assignment Steering Committee Meeting

The Steering Committee met on April 7 to review progress and to identify any data deficiencies. A number of items were discussed:

1) **Stress** - Stress has become a major cause of disability outside of the workers' compensation system. Stress may manifest itself in heart-related problems or ulcers, diagnoseable and treatable ailments. Stress may also manifest itself in mental and emotional problems which are more difficult to diagnose and subsequently treat. Nevertheless, mental and emotional disabilities are on the rise. The relevance of this discussion to the current study is that stress is often job-related and may result in more compensable claims in the *future*. The *current* financial comparison of workers' compensation benefits with private insurance is likely affected by the increase in stress-related claims under private insurance.

2) **Benefit Replacement Ratios** - The impact of the WCB benefit level at 90% of net earnings was reviewed. Several Society of Actuaries' studies have shown that experience under policies with high replacement ratios is generally poorer than experience under policies with lower ratios. The following table, developed

in conjunction with the new 1984 Commissioner's Group Disability Table for valuation purposes, shows the impact of replacement ratios on disability termination rates:

All Sources Replacement Ratio	Termination Rate Adjustment Factor
under 50%	1.20
50% - 59.9%	1.10
60% - 62.9%	1.00
63% - 69.9%	.95
70% - 79.9%	.85
80% - 89.9%	.80
90% - 99.9%	.75
100% +	.70

This table indicates that plans replacing 100% of a claimant's income from all sources experience claim terminations at 70% of normal. Insured disability plans seldom have a benefit level as high as the 90% WCB benefit. However, we were unable to locate any workers' compensation based statistics which would suggest that WCB costs are higher due to the high replacement ratio. In Appendix F we have illustrated, for comparative purposes, the replacement ratios under WCB and private insurance plans.

3) **No-Fault System** - The nature of the no-fault system, under which workers' compensation operates, was reviewed. This simply means that workers are automatically compensated for injuries sustained at work, regardless of fault. Workers then forego their right of access to the courts in return for receiving prompt benefit payments. It is important to point out that this study is conducted under the assumption of a no-fault environment. In most states where private insurance is available as an alternative to workers' compensation benefits from a state fund, the no-fault environment applies to both options. It was felt that this study would have been unduly complicated by removing the no-fault assumption.

4) **Employer Interviews** - At one stage, it was felt that interviews with representative employers may provide some useful input for the study. The Steering Committee felt that these interviews would be unnecessarily time consuming, shedding no new light on the relatively technical comparison process.

5) **Communication Plan** - A brief discussion of the expected communication plan was held preliminary to a subsequent meeting held on April 23.

STEP # 8 - Follow-Up Research

Based upon the discussions of the previous Steering Committee meeting, additional relevant information was collected. This included information on replacement ratios, assessment rates, and investment experience in British Columbia.

STEP # 9 - Comparison Grid

The development of a meaningful grid for comparing WCB benefits and costs with private insurance *equivalents* is a critical step in the study. The comparison is made in three stages:

1) **Benefit Design** - The major WCB benefits (as summarized in Appendix A) were broken down into their key provisions and given a *value* (SCOPE) of 1 for purposes of comparison. Private insurance benefit equivalents generally available in the marketplace were then determined and valued relative to the WCB benefit. A summary of the *Broad Based* private insurance comparisons is shown in Appendix B1. The relative *value* (SCOPE) calculated for the insurance provision was a measure of its worth compared to WCB.

   For example, WCB benefits are generally payable for life while insurance disability benefits generally cease at age 65. The Payment To Age 65 provision was calculated to be worth 0.9 or 90% of the WCB provision which pays for life. The fact that WCB benefits are adjusted for cost of living changes while insurance plans rarely do so was calculated at 0.7, i.e. the lack of cost of living adjustments means this insurance provision is worth only 70% of the WCB provision.

   Every provision of every benefit was valued in this manner. In some cases, there was no private insurance equivalent. For example, WCB provides vocational rehabilitation services to the widow of a deceased worker. No provisions in any private insurance plan presently duplicate this benefit.

The relative contribution of each provision to the overall cost of the benefit was measured and applied to the calculated values for private insurance to obtain an aggregate value. These aggregate values were then weighted by the calculated costs of the WCB benefits as summarized below:

Benefit	Cost as % of Assessable Payroll
Disability	
• compensation	.63%
• permanent	.58%
Sub-Total	1.21%
Medical Aid	.26%
Vocational Rehabilitation	.08%
Fatalities	.04%
Total	1.59%

The weighting produced a grand aggregate *value* (SCOPE) for insurance of .76. This means that a package of *equivalent* private insurance benefits provides only 76% of what is provided through WCB.

It should be noted at this stage that the private insurance benefit comparison has been based upon a broad collection of the group benefits generally available in the marketplace (Appendix B1). As the size of a group decreases and as the *risk* of the group increases, private insurance companies become more restrictive in their underwriting practices and more limited in the disability benefits which they will offer. This is especially true for very small groups (under ten lives). In Appendix B2 we have summarized the insurance industry restrictions that would normally apply to very small groups. Although some private insurance companies will underwrite small groups, many will not. For the medium high risk industries and above, the private insurance market is virtually nonexistent for very small groups.

2) **Benefit Funding** - The comparison of design features served to isolate the impact of different benefit provisions. The comparison of plan funding between WCB and private insurance was then carried out under the assumption that benefits were the same. This allowed us to isolate the impact of funding differences without having to worry about comparing apples with oranges.

A comparison of funding necessarily includes all of the following:

a) Assessment/premium rates;
b) Experience rating;
c) Underwriting; and
d) Adjudication/appeal process.

From a financial standpoint, items a) and b) are directly comparable whereas c) and d) are not. As discussed under Step # 7, the consensus of the Steering Committee was to provide a comparison of assessment/premium based upon a representative cross-section of employers based upon industry/risk and size.

Appendix D2 shows the results of this comparison. Six different risk classes were chosen and within each, five employer size ranges were identified. A typical range of rates as well as an extreme range were shown. For each size range of employer, an *average* WCB assessment rate was compared with a competitive insurance rate. The competitive insurance rates were based upon the assumption of comparable benefits and reflected typical insurance industry loading factors for the appropriate industry risks. They also reflected insurance industry practices with respect to risk loadings and underwriting criteria.

For high and very high risk groups, the comparison is somewhat misleading due to the extreme selectivity which would be exercised by private insurance companies as to which groups they would insure. It is unlikely that very small groups would be covered by private insurance disability coverage and the market for small and some medium groups would be severely limited if the *blue collar* content of the group were high.

To facilitate a more meaningful comparison for these risks, we have included a comparison with *facility* insurance. Facility coverage is common in many casualty coverages where certain risks may be totally ignored by the private insurance market. For example, high risk young male auto drivers are likely uninsurable at any reasonable rate. A facility for these risks is established by the insurance industry with each insurer required to accept a pro-rata portion of these risks at agreed upon rates. The *facility* insurance comparison we have shown is based upon the assumption that these risks would be universally covered by private insurance with no option to decline the risk.

Whereas WCB industry group rates apply to the entire employee population, insurance loadings for industries are generally applied to each identifiable blue collar or white collar group. Consequently, a private insurance rate will vary by the nature and percentage of the blue collar groups, whereas WCB rates will not. We have assumed an appropriate blue collar percentage for each of the risk classifications in order to determine the insurance rate. In situations where the insurance market would be limited or nonexistent, we have noted this factor next to the somewhat hypothetical insurance rate.

Experience rating is a process which determines and modifies rates based upon the experience of a specific group. In Appendix C we have compared the impact of the WCB experience rating process with that of the insurance industry in general. Experience rating is not applied to smaller groups due to the statistical variation and unreliability of claims experience. However, the WCB approach applies it to smaller groups than the insurance industry standard. For very large groups that are not self-insured, WCB experience rating produces generally smaller adjustments than insurance industry standards.

The impact of underwriting on insurance disability rating is perhaps the single greatest difference between the two systems. Essentially, private insurance assesses a risk from a number of standpoints including prior experience, age and sex of employees, medical health of some employees, current state of the industry, stability of the employer group, etc. This risk assessment is called underwriting and is the basis upon which the insurer accepts or declines to write the business and decides what rate to charge.

The underwriting process coupled with market selectivity results in a profile of better risks. Provincial workers' compensation plans accept all risks due to the nature of their mandate. We would therefore expect that their overall costs will be higher. Experience rating allows some adjustment for poorer risks, but they are still covered. The lack of underwriting and market selectivity discretion is evident in the workers' compensation assessment rates. Workers' compensation rates for high risk industries would be much higher than competitive insurance rates largely due to the selectivity exercised by insurance companies, especially for smaller groups.

If the private insurance alternative was unable to exercise selectivity as to which groups it would cover, as in the *facility* process described earlier, the private insurance rates would more closely resemble workers' compensation rates. The difference between the *Competitive* and *Facility* insurance costs as depicted in the last two tables of Appendix D2, gives some measure of the financial impact of the market selectivity process.

The adjudication/appeal process also impacts on funding. Since employees have been denied access to courts, the workers' compensation adjudication/appeal process is designed to be fair to employee claims. Insurance industry adjudication is more strict and there are several limitations which could restrict access to benefits, such as the pre-existing conditions limitations. Appeals of insurance decisions are only possible to the courts and are relatively uncommon compared with the workers' compensation process. We would therefore expect the workers' compensation system to experience a higher rate of claim due to the nature of the adjudication/appeals process. The cost impact of this process has not been estimated and could be significant.

3) **Benefit Delivery** - Assuming a comparability of benefit design and funding, the way in which benefits are delivered will have an overall impact on costs. The costs to deliver disability benefits would include all of the following:

   a) General administrative overhead;
   b) Claims related expenses;
   c) Sales expenses;
   d) Profits;
   e) Taxes;
   f) Risk charges; and
   g) Investment return offsets.

We have included the impact of risk charges in our funding comparisons. Taxes have been ignored although private insurance is assessed a 2% premium tax on net premiums while workers' compensation assessments are not subject to the tax. The remaining items have been compared on a grid based upon employer size. The costs have been expressed as a percent of basic claims cost, both before and after the impact of investment earnings. The latter has been estimated based upon recent portfolio returns for WCB and current *interest*

crediting policies of the insurance industry. Expenses for the WCB benefits were extracted from the 1988 annual report and expressed as a percent of total claim costs.

Insurance figures were developed from a cross-section of competitive companies. It should be noted that developed expenses for workers' compensation benefit delivery are the same for all size employers whereas insurance expenses are much higher for smaller groups than for larger groups. This factor dramatically affects the comparability by group but not so in an overall sense.

STEP # 10 - Development of Communication Plan

On April 23, the Steering Committee met with Mr. Terry Harding, our communication consultant who will prepare the communication resulting from the study findings. The purpose of the meeting was to discuss the Communication Plan and its impact on how the study report would be prepared. As a result, it was agreed that the study report would be augmented with a section which could, by itself, form a major portion of the communication effort.

STEP # 11 - Preparation of Draft Report

STEP # 12 - Draft Report Steering Committee Meeting

Following the preparation of the draft report detailing the nature of the study, methodology, and summary of findings, the Steering Committee met on May 11 to review the draft report. The purpose of this meeting was to ensure consensus from the Committee on the validity of the process used to obtain the relevant findings. As well, the final communication plan was discussed in the context of the study findings. The Committee agreed to meet on May 25, 1990 to review a final draft of the communication document.

STEP # 13 - Presentation of Final Report

Following adjustments resulting from review of the draft report by the Steering Committee, the final report was completed and is now presented to Workers' Compensation Board - Alberta. As outlined in Step # 10, a summary of our findings will be prepared by mid-June, 1990 and made available throughout the province and to other interested parties throughout North America.

SECTION IV -- OBSERVATIONS AND CONCLUSIONS

For purposes of summarizing the findings of our study, we will restate Objective # 1 of the study:

> *"To have an outside actuarial consulting firm with relevant professional experience compare the cost, services, and benefits of coverage provided by Workers' Compensation Board - Alberta, with comparable coverage available from the insurance marketplace in Alberta."*

Our comparison has been carried out in three broad areas; benefit design, benefit funding and benefit delivery. Our major observations on each of these areas are noted below:

Benefits Design

1. WCB benefits are multifaceted and cannot simply be compared with private insurance disability benefits.

2. WCB benefits are paid on a first payor basis, focus primarily on occupational disabilities and are largely concerned with accidents. Private insurance benefits are paid on a last payor basis, have a twenty-four hour coverage focus and are more concerned with sickness.

3. WCB disability benefits are richer than currently available through private insurance equivalents due to:
   (a) higher benefit levels;
   (b) benefits payable for life; and
   (c) cost of living adjustments.

4. WCB offers more comprehensive ancillary benefits, more effectively meeting the needs of insured constituents. For example:

   (a) death benefits are paid as pensions to widows rather than in a lump sum; and

   (b) benefits are paid until children are no longer dependent and then are based upon the employability of the spouse.

5. WCB medical aid benefits are comprehensive although they duplicate provisions of provincial health care.

6. WCB has a major focus on the rehabilitation of the injured worker, specifically evident in two of the five overall goals:

   (a) to achieve early re-employment of insured workers; and
   (b) to achieve early restoration of pre-accident independence.

   Private insurance activities in this area are primarily designed to control disability costs.

7. WCB has a major focus on reducing injuries related to accidents in the workplace. Private insurance has not taken the same role in reducing sickness and accidents in the workplace due to workers' compensation legislation. Rather, employers have taken the lead recently with the establishment of Employee Assistance Plans.

8. Private insurance is more flexible than WCB in benefits design, specifically in the areas of:

   (a) benefit levels;
   (b) waiting periods;
   (c) definition of disability; and
   (d) cost of living treatment.

   Presumably private insurance provisions in a competitive environment would be more standardized due to legislation (as is the case in the U.S.).

Benefits Funding

1. The major difference between the WCB and private insurance approaches lies in the underwriting/rating process. Insurance companies are more selective and have developed a narrower rating band while WCB covers all risks and has developed a more comprehensive and wider rating band.

2. The experience rating processes are similar. The WCB process has more direct impact on smaller groups and less impact on very large groups.

3. As a result of the underwriting/rating process, the following observations are valid:
   (a) WCB costs are lower for the better risk industries.
   (b) WCB generally produces lower costs for smaller employers.
   (c) WCB is moderately less expensive for some selected *medium high* risk industries.
   (d) WCB is more expensive for higher risk industries. However, some of the very high risks would have difficulty securing private coverage at any cost, especially if the group was small.
   (e) WCB is generally more expensive for larger groups due to the impact of level expense loads and rating techniques.
   (f) Groups with favorable claims experience will be treated more favorably under WCB than under private insurance. Groups with poor claims experience will generally pay more under WCB than the private insurance environment, unless they are very large.

4. The following groups will generally fare better under WCB:
   (a) small groups;
   (b) older groups;
   (c) groups with a higher female content;
   (d) groups with a high *blue collar* content;
   (e) smaller groups with good experience; and
   (f) very large groups with poor experience.

Benefits Delivery

1. Generally, WCB is equally as efficient as the private insurance industry in the overall delivery of benefits.
2. In its own right, WCB would rank very high among insurers in terms of premium volume and covered benefit volume.
3. The WCB investment of assets impacts more directly and favorably on all sized groups than in private insurance.
4. Expense pooling under the WCB approach is advantageous to smaller groups.

Overall

Notwithstanding the specific factors mentioned earlier, other factors distort the financial and benefits comparison:

1. As a result of the *no-fault* mandate WCB is more effective in delivering benefits, but at a higher *cost*.
2. The first payor status of WCB tends to increase costs.
3. As noted, the richer benefits of WCB tend to increase costs.
4. The fact that current WCB benefit costs are not *fully-funded* has held down costs in the past, but may tend to increase them in the future.
5. The universality of WCB coverage generally tends to increase overall costs, but the impact is varied for the different risk/size classifications.
6. The WCB as a provider of benefits, is more stable than the private insurance market, especially when compared with the general (casualty) insurance market which provides WCB alternatives in the U.S.

The specific observations of this study have confirmed many pre-conceived notions but perhaps refuted others. In a competitive environment, the WCB would compare very favorably with competitors from the private insurance industry due to the size, experience, and efficiency of the current operation. This study has highlighted the various factors which tend to distort meaningful comparisons and put both the WCB and private insurance equivalents in their proper perspectives.

APPENDIX A

MAJOR WCB BENEFITS

WORKER'S COMPENSATION BOARD - ALBERTA
MAJOR WCB BENEFITS

I DISABILITY

- occupational injury primarily due to accident
- 90% of net earnings
- salary maximum of $40,000
- minimum total disability pension $730/month
- payable from first day
- temporary pensions pay until disability ceases
- permanent pensions pay for life, subject to annual review for cost of living adjustment purposes
- partial disability benefits paid based upon assessed impairment of earning capacity
- possible additional award for disfigurement
- adjustments for apprentices or disabled workers reaching age 18
- commutations available for partial disability (generally 25% or less disability)

II DEATH (Primarily accidental)

- a pension is paid to spouse equal to worker's permanent total disability pension
- payable until youngest child reaches age 18

- residual spouse's benefit paid if no children or upon youngest child reaching age 18

  - if spouse employed,

    100% of pension for 1 year
    80% of pension for 1 year
    60% of pension for 1 year
    40% of pension for 1 year
    20% of pension for 1 year

    paid as 3 times annual pension in a lump sum

  - if spouse is an invalid or is unable to be vocationally rehabilitated,

    75% of pension is paid for life

  - if spouse is unemployed but capable of working, 96 times monthly pension is paid in a lump sum

- minor burial expenses of $2800.

III MEDICAL AID

- reimburses Alberta Health Care for all medical expenses and associated administrative expenses
- prescription drugs
- clothing allowance
- travel allowance
- home care allowance

IV VOCATIONAL REHABILITATION

- physical and psychological services
- relocation for *occupational* diseases
- vocational training
- earnings supplements and subsidies
- incurred expenses while being rehabilitated
- also applies to dependent spouse of deceased worker

APPENDIX B

PRIVATE INSURANCE BENEFIT COMPARISONS

APPENDIX B1
BROAD BASED INSURANCE COMPARISONS

I DISABILITY (Primarily LTD)

- generally 24 hour coverage is provided although it may be non-occupational, recognizing that WCB benefits are also payable
- benefit levels generally lower at 60 - 75% of gross earnings, maximum 85% of NET income from all sources
- minimum pension seldom provided
- maximum benefits are generally equal to, or greater than, $3000 per month
- Cost of living adjustments are available, but seldom provided due to cost
- elimination periods range from 17 to 52 weeks for long term disability, however, benefits are generally paid from first day for short-term coverage
- temporary benefits are similar to WCB
- permanent benefits are paid to 65, not for life (pension accruals may be provided in addition to basic benefit)
- no adjustments are paid for special situations

II DEATH (Separate benefits)

- Survivor Income Benefit plans are available but are generally not found in most benefits plans
- Survivor Income benefits would be payable to age 65 with additional children's benefits
- lump sum benefits are more typical and generally worth less than Survivor Income benefits
- Survivor Income benefits generally pay at 40 to 50% of gross salary, not 90% of net
- some residual dowry benefits but cessation is based upon remarriage, not ability to work

- Accidental Death & Dismemberment benefits have some comparability since primary cause of WCB deaths is accidental

III MEDICAL AID (Extended Health Care)

- EHC benefits would pay most medical expenses not covered under AHC
- no clothing allowances
- no travel or subsistence allowances
- some home care (private duty nurse, outpatient)

IV REHABILITATION (Part of Disability Benefits)

- no specific supplements or subsidies other than payable from earnings from rehabilitative employment
- no strong commitment to physical or psychological services
- some vocational training provided but generally limited
- no assistance for spouses is available from either disability or death benefits

APPENDIX B2
VERY SMALL GROUP INSURANCE RESTRICTIONS

The following is a summary of the typical insurance industry restrictions on disability coverage for groups with under 10 covered employees. For such groups in medium high risk industries and above (see below), coverage is generally not available.

- **Benefit Level** - Generally restricted to 2/3 of gross earnings on a taxable basis.
- **Maximum Benefit** - Monthly benefits are limited to no more than $2500.
- **Pre-existing Conditions** - No benefits are provided for disabilities for which treatment was provided within 12 months of becoming insured. This generally applies to sickness benefits but may also apply to accident benefits where a pre-existing condition was aggravated.
- **Payment Period** - Benefits may be restricted to a 5-year payment period.
- **Excluded Industries**:

Auto Building Wreckers
Auto Repair
Barbers, Beauty Salon
Bars, Restaurants
Charitable Organizations
Cleaning Services
Convenience/Variety Stores
Courier/Delivery Services
Cleaning/Laundry
Entertainment
Farm and Fishing
Food/Catering Services
Gas Stations
Insurance Agencies
Landscaping/Gardening
Meat Processing Plants
Mills, Forestry
Motels/Hotels
Moving and Haulage Firms
Parking Lots
Real Estate Agencies
Refuse/Salvage Firms
Shoe, Watch, and Jewelry Repair
Taxis, Limousine and Bus Services
Used Car Dealers

APPENDIX C

EXPERIENCE RATING COMPARISONS

EXPERIENCE RATING COMPARISONS
GOOD EXPERIENCE

Risk/Size Grouping	3 Year Assess/Prem	3 Year Incurred Claims	Experience Rate Adjustment WCB	Experience Rate Adjustment Insurance
Low Risk				
• very small	1,313	788	- 1%	0
• small	13,125	7,875	- 7%	0
• medium	52,500	31,500	-20%	- 2%
• large	262,500	157,500	-20%	- 8%
• very large	1,312,500	787,500	-20%	-40%
Medium Low Risk				
• very small	3,000	1,800	- 2%	0
• small	30,000	18,000	-15%	0
• medium	120,000	72,000	-20%	- 2%
• large	600,000	360,000	-20%	- 8%
• very large	3,000,000	1,800,000	-20%	-40%
Medium Risk				
• very small	9,375	5,625	- 5%	0
• small	93,750	56,250	-20%	0
• medium	375,000	225,300	-20%	- 2%
• large	1,875,000	1,125,000	-20%	- 8%
• very large	9,375,000	5,625,000	-20%	-40%
Medium High Risk				
• very small	18,750	11,250	- 9%	0
• small	187,500	112,500	-20%	0
• medium	750,000	450,000	-20%	- 2%
• large	3,750,000	2,250,000	-20%	- 8%
• very large	18,750,000	11,250,000	-20%	-40%
High Risk				
• very small	26,250	15,750	-13%	0
• small	262,500	157,500	-20%	0
• medium	1,050,000	630,000	-20%	- 2%
• large	5,250,000	3,150,000	-20%	- 8%
• very large	26,250,000	15,750,000	-20%	-40%
Very High Risk				
• very small	48,750	29,250	-20%	0
• small	487,500	292,500	-20%	0
• medium	1,950,000	1,170,000	-20%	- 2%
• large	9,750,000	5,850,000	-20%	- 8%
• very large	48,750,000	29,250,000	-20%	-40%

EXPERIENCE RATING COMPARISONS
POOR EXPERIENCE

Risk/Size Grouping	3 Year Assess/Prem	3 Year Incurred Claims	Experience Rate Adjustment WCB	Experience Rate Adjustment Insurance
Low Risk				
• very small	1,313	1,838	1%	0
• small	13,125	18,375	7%	0
• medium	52,500	73,500	20%	2%
• large	262,500	367,500	20%	8%
• very large	1,312,500	1,837,500	20%	40%
Medium Low Risk				
• very small	3,000	4,200	2%	0
• small	30,000	42,000	15%	0
• medium	120,000	168,000	20%	2%
• large	600,000	840,000	20%	8%
• very large	3,000,000	4,200,000	20%	40%
Medium Risk				
• very small	9,375	13,125	5%	0
• small	93,750	131,250	20%	0
• medium	375,000	525,000	20%	2%
• large	1,875,000	2,625,000	20%	8%
• very large	9,375,000	13,125,000	20%	40%
Medium High Risk				
• very small	18,750	26,250	9%	0
• small	187,500	262,500	20%	0
• medium	750,000	1,050,000	20%	2%
• large	3,750,000	5,250,000	20%	8%
• very large	18,750,000	26,250,000	20%	40%
High Risk				
• very small	26,250	36,750	13%	0
• small	262,500	367,500	20%	0
• medium	1,050,000	1,470,000	20%	2%
• large	5,250,000	7,350,000	20%	8%
• very large	26,250,000	36,750,000	20%	40%
Very High Risk				
• very small	48,750	68,250	20%	0
• small	487,500	682,500	20%	0
• medium	1,950,000	2,730,000	20%	2%
• large	9,750,000	13,650,000	20%	8%
• very large	48,750,000	68,250,000	20%	40%

APPENDIX D

DETAILED COMPARISON GRIDS

APPENDIX D1
BENEFIT COMPARISON GRID

	W.C.B.		INSURANCE	
BENEFIT PROVISION	**Description**	**Scope**	**Description**	**Scope**
Disability				
• Coverage	• Occupational only Mostly Injury (accident)	1 1	• 24 hours Injury & Sickness	1.3 to 2.0
• Payable from	• 1st day	1	• 1st day injury 4th-7th day sickness	1.0
• Benefit period	• For life	1	• To Age 65 definition changes @ 2 yrs	0.9
• Benefit %	• 90% of *net*, no offsets since WCB is *First Payer*	1	• 70% gross earnings, offset by CPP benefits	0.7
• Salary maximum	• $40,000	1	• Generally higher than $40,000	1.1
• Taxable	• No	1	• Yes, if paid by employer	0.9
• Minimum benefit	• $730/mo	1	• Generally none	1.0
• Partial disability benefits	• Yes, by % of rated disability	1	• Some *earnings loss* benefits paid for shorter term disabilities, some dismemberment	0.9
• Additional benefits	• Yes, for disfigurement and apprentices	1	• None other than some dismemberment benefits	0.9
• Cost of living adjustments	• Yes	1	• Seldom	0.7
AGGREGATE		1	*Relative Weighting - 76%*	0.8

Conclusions:

- Typical private insurance disability benefits are only 80% as good as WCB disability benefits based upon the *value* of all provisions. The better WCB benefits are largely due to a higher benefit (90%), cost of living adjustments, and benefits which are payable for life.

	W.C.B.		INSURANCE	
BENEFIT PROVISION	**Description**	**Scope**	**Description**	**Scope**
Death				
• Basic benefit	• Permanent total disability benefit to spouse	1	• Lump sum of up to 3 x earnings, some survivor benefits (SIB)	1.7
• Residual benefit	• Pension ceases when youngest child 18, residual of 3 x if employed, 8 x if not, 75% if unable to work	1	• Dowry benefits in Survivor Plans (SIB), although rare	0.9
• Additional Benefits	• Burial & some spouses benefits	1	• None	n/a
AGGREGATE		1	*Relative Weighting - 3%*	1.3
Medical Aid				
• Basic	• Reimburse AHC for all related costs	1	• AHC would pick up physician & hospital benefits, not private insurance	n/a
• Additional	• Prescription drugs, physiotherapy	1	• EHC Plans would pick up drugs, physiotherapy, etc.	0.8
• Miscellaneous	• Clothing, travel, home care, treatment @ Rehab Centre	1	• Some home care (private duty), minimal benefits under LTD rehab provisions	0.9
AGGREGATE		1	*Relative Weighting - 16%*	0.5
Vocational Rehabilitation				
• Basic	• Physical & Psychological assistance Vocational training	1	• Minimal counselling Minimal training	0.6
• Additional	• Supplements & expenses	1	• Partial offsets of rehab earnings	0.5
• Miscellaneous	• Dependent spouse has same access as injured worker	1	• None	n/a
AGGREGATE		1	*Relative Weighting - 5%*	0.5
GRAND AGGREGATE		1		0.76

Conclusions:

- Typical private insurance medical and vocational rehabilitation benefits are only 50% as good as WCB benefits. Typical private insurance death benefits are 30% more valuable than WCB death benefits. Considering <u>all</u> benefits provided by WCB, typical private insurance comparable benefits are only 76% as good as WCB benefits.

COST COMPARISON TABLE
LOW RISK INDUSTRIES

1. **Typical Industries**
   - Clerical & Professional
   - Public Service

2. **WCB Cost Ranges as a % of Payroll**
   - Typical .24% to 1.00%
   - Extremes .20% to 1.89%

3. **Comparison with Private Insurance based upon <u>average</u> costs and assuming comparable benefits**

		Assessment Per $100 Salary	
<u>Size</u>	**<u>Employees</u>**	**<u>WCB</u>**	**<u>Insurance</u>**
Very Small	0 - 10	.50	.82*
Small	11 - 100	.55	.79
Medium	101 - 500	.58	.75
Large	501 - 2500	.60	.71
Very Large	2501 +	.62	.70

* *Insurance market is limited*

4. **Conclusions**
   - WCB is less expensive than private insurance, more so for smaller groups

COST COMPARISON TABLE
MEDIUM LOW RISK INDUSTRIES

1. **Typical Industries**

   - Retail
   - Services
   - Communications

2. **WCB Cost Ranges as a % of Payroll**

   - Typical .40% to 2.00%
   - Extremes .23% to 4.32%

3. **Comparison with Private Insurance based upon <u>average</u> costs and assuming comparable benefits**

		Assessment Per $100 Salary	
<u>Size</u>	**<u>Employees</u>**	**<u>WCB</u>**	**<u>Insurance</u>**
Very Small	0 - 10	1.16	1.10*
Small	11 - 100	1.19	1.05
Medium	101 - 500	1.20	1.00
Large	501 - 2500	1.21	.95
Very Large	2501 +	1.22	.93

* *Insurance market is limited*

4. **Conclusions**

   - Private insurance is slightly less expensive than WCB, more so for larger groups

COST COMPARISON TABLE
MEDIUM RISK INDUSTRIES

1. **Typical Industries**
   - Agriculture
   - Food
   - Most Manufacturing

2. **WCB Cost Ranges as a % of Payroll**
   - Typical 2.00% to 3.00%
   - Extremes 0.45%4 to 6.43%

3. **Comparison with Private Insurance based upon <u>average</u> costs and assuming comparable benefits**

		Assessment Per $100 Salary	
<u>Size</u>	**<u>Employees</u>**	**<u>WCB</u>**	**<u>Insurance</u>**
Very Small	0 - 10	3.40	3.45*
Small	11 - 100	3.15	3.20
Medium	101 - 500	3.05	3.00
Large	501 - 2500	2.95	2.85
Very Large	2501 +	2.90	2.80

* *Insurance market is limited*

4. **Conclusions**
   - WCB and private insurance costs are about the same

COST COMPARISON TABLE
MEDIUM HIGH RISK INDUSTRIES

1. **Typical Industries**
   - Construction
   - Mining
   - Some Oil & Gas

2. **WCB Cost Ranges as a % of Payroll**

• Typical	3.00%	to	6.00%
• Extremes	1.20%	to	9.21%

3. **Comparison with Private Insurance based upon <u>average</u> costs and assuming comparable benefits**

		Assessment Per $100 Salary	
<u>Size</u>	**<u>Employees</u>**	**<u>WCB</u>**	**<u>Insurance</u>**
Very Small	0 - 10	6.00	7.15*
Small	11 - 100	5.40	6.05
Medium	101 - 500	5.10	5.50
Large	501 - 2500	4.90	5.25
Very Large	2501 +	4.80	5.10

* *Insurance market is limited*

4. **Conclusions**
   - WCB is less expensive than private insurance, more so for smaller groups

COST COMPARISON TABLE
HIGH RISK INDUSTRIES

1. **Typical Industries**
   - Transportation
   - Some Forestry

2. **WCB Cost Ranges as a % of Payroll**
   - Typical 6.00% to 10.00%
   - Extremes 1.28% to 9.61%

3. **Comparison with Private Insurance based upon <u>average</u> costs and assuming comparable benefits**

		Assessment Per $100 Salary		
<u>Size</u>	**<u>Employees</u>**	**<u>WCB</u>**	**Competitive <u>Insurance</u>**	**Facility <u>Insurance</u>**
Very Small	0 - 10	9.70	*	11.60
Small	11 - 100	8.85	*	9.60
Medium	101 - 500	8.30	6.50	8.30
Large	501 - 2500	7.80	5.85	7.50
Very Large	2501 +	7.55	5.50	7.00

* *Insurance market is limited or non-existent, and benefits may be severely limited*

4. **Conclusions**
   - WCB is more expensive than private insurance, more so for larger groups
   - Private insurance may not be available for very small groups

COST COMPARISON TABLE
VERY HIGH RISK INDUSTRIES

1. **Typical Industries**

   - Logging
   - Well Servicing
   - Roofing

2. **WCB Cost Ranges as a % of Payroll**

   - Typical over 10.00%
   - Extremes 9.03% to 17.18%

3. **Comparison with Private Insurance based upon <u>average</u> costs and assuming comparable benefits**

		Assessment Per $100 Salary		
<u>Size</u>	**<u>Employees</u>**	**<u>WCB</u>**	**Competitive Insurance**	**Facility Insurance**
Very Small	0 - 10	12.00	*	14.20
Small	11 - 100	11.15	*	12.10
Medium	101 - 500	10.50	8.00	10.50
Large	501 - 2500	9.70	7.20	9.45
Very Large	2501 +	9.40	6.80	8.95

* *Insurance market is limited or non-existent, and benefits may be severely limited*

4. **Conclusions**

   - WCB is more expensive than private insurance, especially so for larger groups
   - Private insurance may not be available for small and very small groups

DELIVERY COMPARISON GRID
ADMINISTRATION EXPENSES *

	W.C.B.					INSURANCE						
GROUP SIZE	General Admin	Claims Admin	Total	Interest	Net Total	General Admin	Sales	Claims Admin	Profit	Total	Interest	Net Total
Very Small	11%	7%	18%	(41%)	(23%)	16%	17%	7%	5%	45%	(25%)	20%
Small	11%	7%	18%	(41%)	(23%)	10%	11%	5%	4%	30%	(30%)	0%
Medium	11%	7%	18%	(41%)	(23%)	4%	7%	4%	3%	18%	(35%)	(17%)
Large	11%	7%	18%	(41%)	(23%)	2%	5%	3%	2%	12%	(38%)	(26%)
Very Large	11%	7%	18%	(41%)	(23%)	2%	4%	2%	2%	10%	(40%)	(30%)
Overall	11%	7%	18%	(41%)	(23%)	4%	6%	4%	3%	17%	(36%)	(19%)

- *Expenses are expressed as a % loading to basic claims cost (based upon WCB administration costs averaged over the last three years)*

Conclusions:

- *overall expenses are comparable between WCB and private insurance*
- *private insurance is more expensive for smaller groups, WCB is more expensive for larger groups*
- *WCB generally returns more investment earnings to all sized groups, more so for smaller groups*

APPENDIX E

FINANCIAL SUMMARIES

APPENDIX E
FINANCIAL SUMMARIES

1. Assessment Revenues - WCB Alberta

Year	Assessment* Revenue	Average Actual	Assessment Rate Full Funding
1988	$320,803	$1.59	$1.81
1987	$281,978	$1.56	$1.73
1986	$302,477	$1.68	$2.00

2. Claims Costs and Administration Expenses

	Claims Payments *				
Year	Compensation	Vocational Rehabilitation	Medical Aid	Pensions	Admin Expenses
1988	$124,406	$15,833	$51,858	$121,285	$40,956
1987	$117,454	$15,408	$49,694	$124,142	$37,799
1986	$135,198	$12,592	$48,830	$119,648	$37,948

3. Investment Assets

		Asset Mix				
Year	Invested * Assets	Bonds	Equities	Market	Other	Rate Of Return
1988	$1,313,159	55%	21%	15%	9%	10.05%
1987	$1,229,843	64%	22%	5%	9%	10.69%
1986	$1,181,123	69%	17%	7%	9%	11.58%

4. U.S. Competitive State Funds (1987)

State	Premium *	Market Share	Invested* Assets
Arizona	$ 177,341	45%	$ 617,072
California	1,488,280	23%	2,879,364
Colorado	192,240	43%	489,781
Idaho	36,504	31%	99,507
Maryland	104,939	17%	317,637
Michigan	135,719	14%	428,808
Minnesota	41,827	8%	44,274
Montana	70,161	55%	35,311
New York	669,116	36%	2,519,416
Oklahoma	83,626	28%	277,642
Oregon	249,011	43%	1,047,334
Pennsylvania	108,965	6%	958,319

5. U.S. Monopolistic Funds (1987)

State	Premium *	Invested* Assets
Nevada	$163,694	$ 542,857
North Dakota	20,314	182,106
Ohio	965,761	5,318,980
Washington	572,012	2,902,307
West Virginia	170,500	722,800
Wyoming	27,122	11,468

** 000's omitted*

APPENDIX F

REPLACEMENT RATIOS

APPENDIX F
DISABILITY REPLACEMENT RATIOS

				Average Non-Taxable Plan			Rich Non-Taxable Plan			WCB Alberta Plan		
	Net Income			No Maximum Non-Taxable 50%			$36,000 Maximum Benefit Non-Taxable 65%			$40,000 Maximum Salary Non-Taxable 90% "Net"		
Gross Income	Single	Married	Family	Single	Married	Family	Single	Married	Family	Single	Married	Family
20,000	15,776	17,035	17,426	10,000 63%	10,000 59%	10,000 57%	13,000 82%	13,000 76%	13,000 75%	14,198 90%	15,332 90%	15,683 90%
30,000	22,591	23,850	24,241	15,000 66%	15,000 63%	15,000 62%	19,500 86%	19,500 82%	19,500 80%	20,332 90%	21,465 90%	21,817 90%
40,000	28,745	30,004	30,395	20,000 70%	20,000 67%	20,000 66%	26,000 90%	26,000 87%	26,000 86%	25,871 90%	27,004 90%	27,336 90%
50,000	34,936	36,195	36,586	25,000 72%	25,000 69%	25,000 68%	32,500 93%	32,500 90%	32,500 89%	25,871 74%	27,004 75%	27,336 75%
60,000	40,934	42,193	42,584	30,000 73%	30,000 71%	30,000 70%	36,000 88%	36,000 85%	36,000 85%	25,871 63%	27,004 64%	27,336 64%
70,000	46,686	47,945	48,335	35,000 75%	35,000 73%	35,000 72%	36,000 77%	36,000 75%	36,000 74%	25,871 55%	27,004 56%	27,336 57%

Assumptions:

1989 Alberta Tax Rates
Federal and Provincial Tax Included
Net Income - U.I.C. and C.P.P. deducted
Net Benefits (Taxable) - Includes Disability Tax Credit
Non-Taxable benefit excludes sales/child tax credits normally payable
No surtaxes included

Percentages depict net benefit as a percentage of net income and reveal the level of 'take-home' income which is replaced by the disability benefit

				Common Taxable Plan				Rich Taxable Plan				WCB Alberta Plan		
	Net Income			No Maximum Taxable 70%				$42,000 Maximum Benefit Taxable 75%				$40,000 Maximum Salary Non-Taxable 90% "Net"		
Gross Income	Single	Married	Family	Gross Benefit	Single	Married	Family	Gross Benefit	Single	Married	Family	Single	Married	Family
20,000	15,776	17,035	17,426	14,000	12,839 81%	14,098 83%	14,488 83%	15,000	13,590 86%	14,848 87%	15,239 87%	14,198 90%	15,332 90%	15,683 90%
30,000	22,591	23,850	24,241	21,000	18,095 80%	19,354 81%	19,745 81%	22,500	19,222 85%	20,481 86%	20,871 86%	20,332 90%	21,465 90%	21,817 90%
40,000	28,745	30,004	30,395	28,000	23,326 81%	24,585 82%	24,975 82%	30,000	24,564 85%	25,823 86%	26,214 86%	25,871 90%	27,004 90%	27,336 90%
50,000	34,936	36,195	36,586	35,000	27,660 79%	28,919 80%	29,309 80%	37,500	29,207 84%	30,466 84%	30,857 84%	25,871 74%	27,004 75%	27,336 75%
60,000	40,934	42,193	42,584	42,000	31,993 78%	33,252 79%	33,643 79%	42,000	31,993 78%	33,252 79%	33,643 79%	25,871 63%	27,004 64%	27,336 64%
70,000	46,686	47,945	48,335	49,000	36,327 78%	37,586 78%	37,976 79%	42,000	31,993 69%	33,252 69%	33,643 70%	25,871 55%	27,004 56%	27,336 57%

Assumptions:

1989 Alberta Tax Rates
Federal and Provincial Tax Included
Net Income - U.I.C. and C.P.P. deducted
Net Benefits (Taxable) - Includes Disability Tax Credit
Non-Taxable benefit excludes sales/child tax credits normally payable
No surtaxes included

Percentages depict net benefit as a percentage of net income and reveal the level of 'take-home' income which is replaced by the disability benefit

APPENDIX G

STEERING COMMITTEE

APPENDIX G
STEERING COMMITTEE

STEERING COMMITTEE MEMBERS:

- Mr. Don M. Herring, Managing Director
  Canadian Association of Oilwell Drilling Contractors
  Calgary, Alberta

- Mr. Paul Petry, Manager Human Resources
  Canbra Foods
  Lethbridge, Alberta

- Mr. Robert W. Saari, Vice-President Alberta Division
  Canadian Manufacturers Association
  Edmonton, Alberta

- Mr. Ladis Vegh, Vice-President of Risk & Pension Fund Management
  Canadian Utilities
  Edmonton, Alberta

- Mr. Doug Wright, Director Provincial Affairs - Alberta
  Canadian Federation of Independent Business
  Edmonton, Alberta

PROJECT CONSULTANT - CROUSE DORGAN CONSULTANTS INC.:

- Mr. John W. Crouse MA, FSA, FCIA, Principal
  Crouse Dorgan Consultants Inc.
  Edmonton, Alberta

- Mr. Perry V. Dorgan, Principal
  Crouse Dorgan Consultants Inc.
  Edmonton, Alberta

- Mr. Terry Harding, President
  Harwick Consultants Ltd.
  Edmonton, Alberta